

ABSTRACT

In a wireless communication device which performs a wireless communication on an internal power supply without use of a commercial power, the period of a disturbance
5 electromagnetic wave from a microwave oven or the like is accurately detected to avoid any effect of the disturbance electromagnetic wave.

A receiving circuit 3 and a transmitting circuit 4 are connected to a transmitting/receiving antenna 1 through a
10 transmitter/receiver switching circuit 2 and a frequency synthesizer 15 is also provided. An RSSI signal detected by the receiving circuit 3 is compared by a comparator 29 with a frequency-divided signal supplied by a variable frequency dividing circuit 28 which performs a frequency dividing
15 operation on a master clock with a gradually varying frequency dividing ratio. When the two signals coincide, a period determination circuit 30 supplies a radiation period signal synchronized with the disturbance wave to a received data processor 21, a frequency hopping controller 22, a transmission
20 data processor 23, and a power supply controller 25, so that a control signal to keep the communication connection established can be shifted into a frequency band with no effect of the disturbance wave and data transmission/reception can be performed during a period of time while no disturbance wave
25 is radiated.